

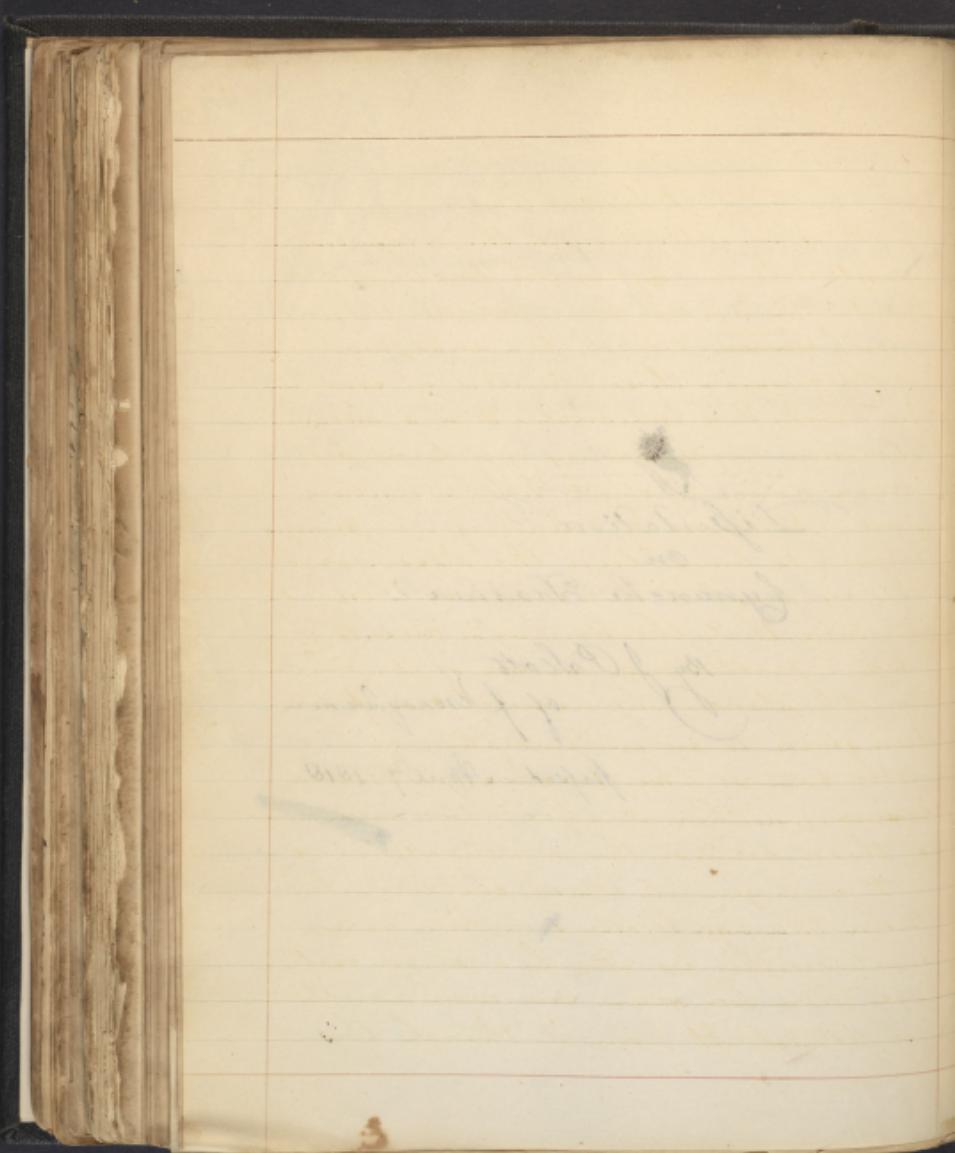
A
Dissertation
on
Cynanche Trachealis

By J. P. Scott
of Pennsylvania

Entered April 7. 1818



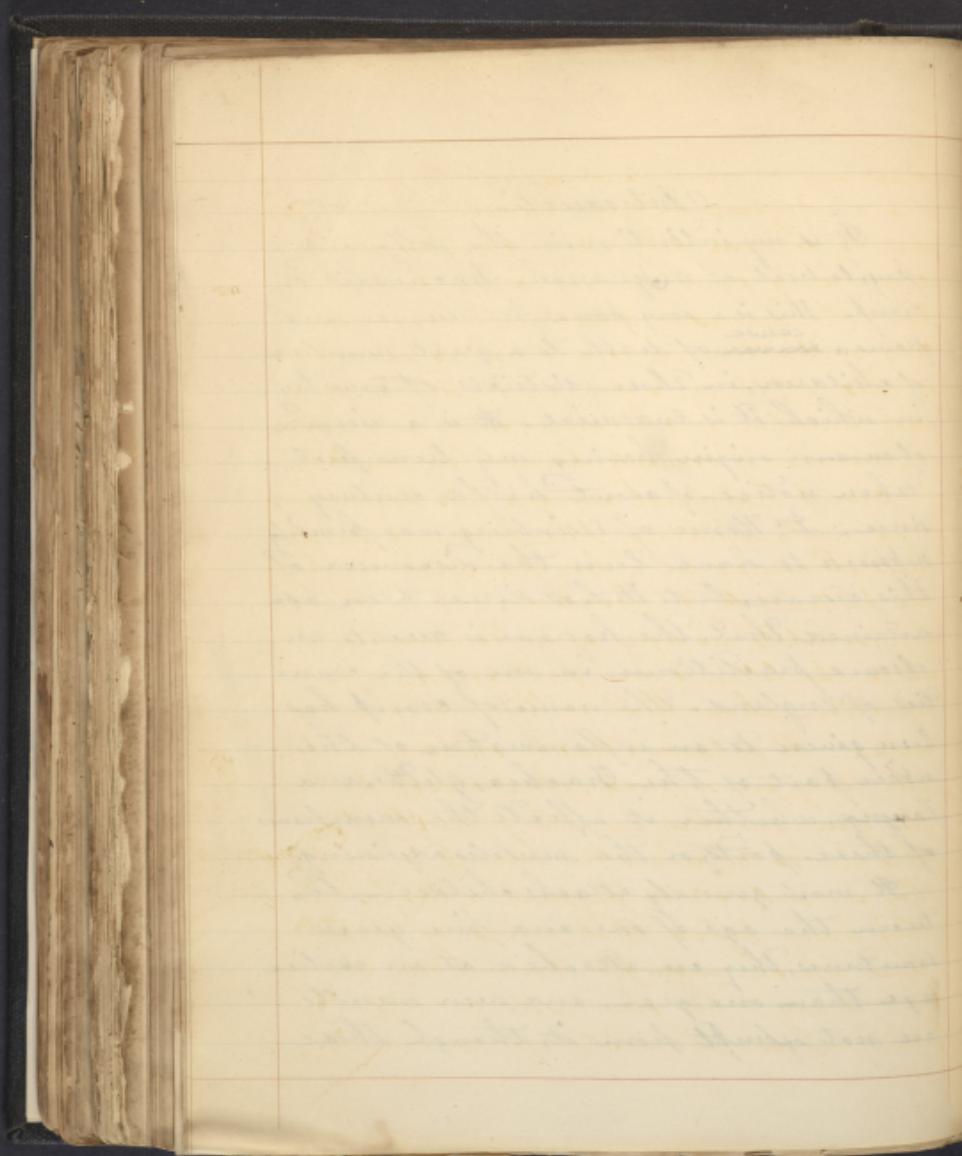
J. P. S.



Introduction

It is my intention, in the following pages, to treat of Cynanche Trachealis or Croup. This is a very powerful disease, and proves a ~~cause~~ cause of death to a great number of children, in those districts of country in which it is endemic. It is a disease of unknown origin, having only been first taken notice of about half a century since. Dr Home of Edinburgh was formerly supposed to have been the discoverer of this disease, but it has since been ascertained, that, the honour is due to an obscure practitioner in one of the counties of England. The name of croup has been given to an inflammation of the upper part of the Trachea, glottis, and Larynx, whether it affects the membranes of these parts, or the muscles adjoining.

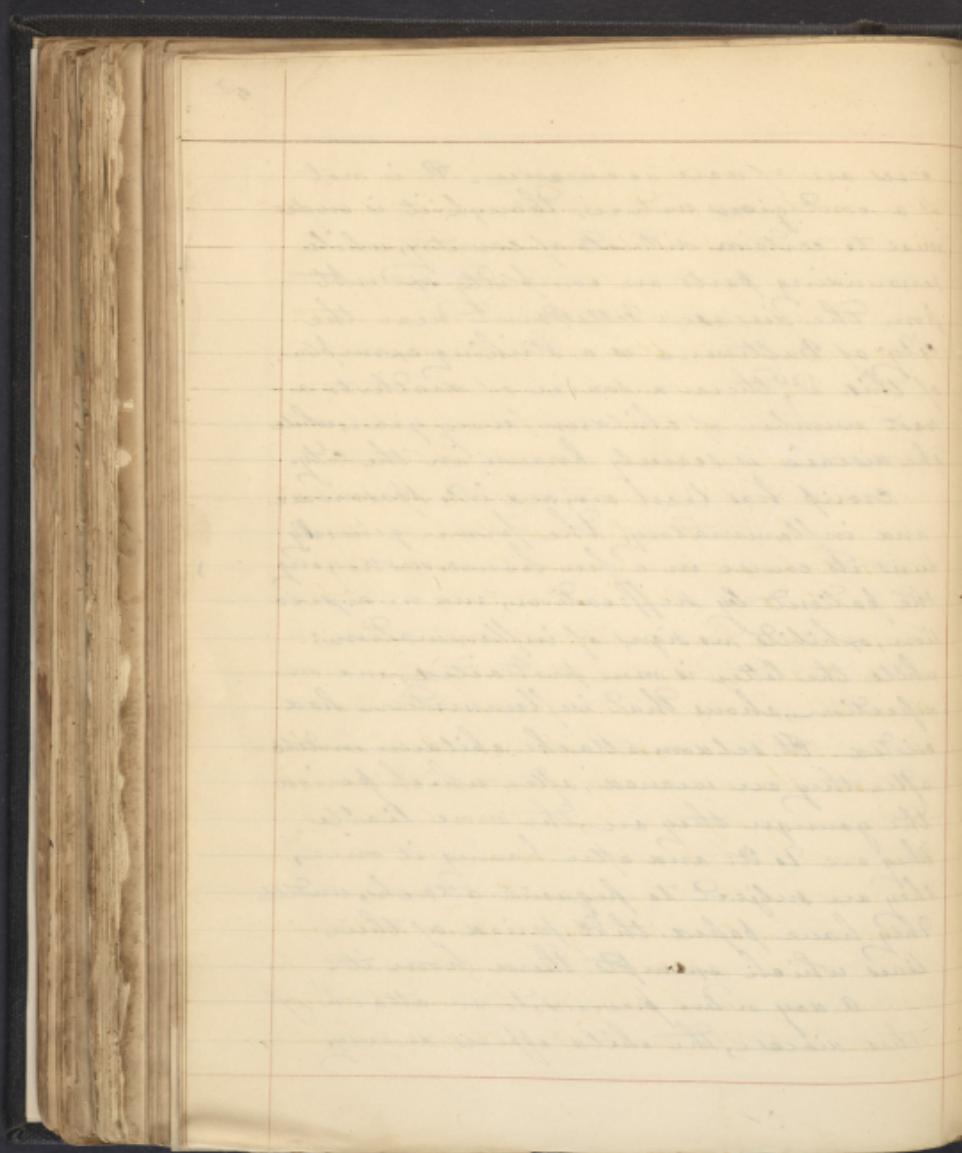
It most generally attacks children, between the age of one and five years; sometimes, they are attacked at an earlier age than one year, and even adults are not exempt from it, though these



cases are of rare occurrence. It is not of a contagious nature, though it is endemic to certain districts of country, while surrounding parts are completely exempt from the disease. Fell's Point near the city of Baltimore is a striking example of this. It is there a source of death, to a vast number of children, every year, while the disease is scarcely known in the city.

Croup has been divided into spasmodic, and inflammatory; the former generally runs its course in a few hours, destroying the patient by suffocation, and on inspection, exhibits no signs of inflammation; while the latter is more protracted, and on inspection, shows that inflammation had existed. It seldom attacks children until after they are weaned, after which period the younger they are, the more liable they are to it; and after having it once, they are subject to frequent attacks, until they have passed that period of their lives which exempts them from it.

A day or two previous to an attack of this disease, the child appears drowsy,

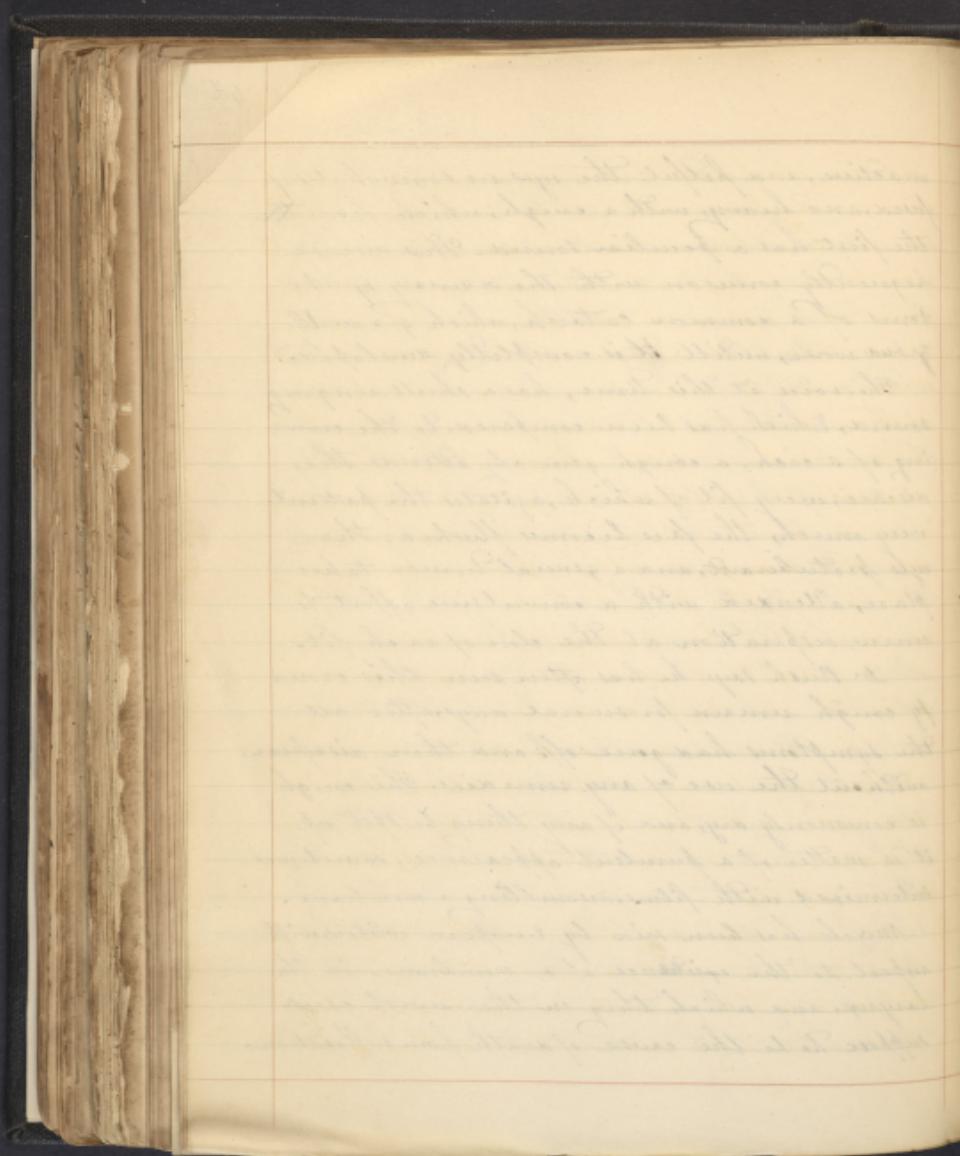


inactive, and fitful: the eyes are somewhat ^{swell}
puffed, and heavy, with a cough; which from ^{the}
the first has a peculiar sound. This disease
frequently comes on with the ordinary symp-
toms of a common catarach, which gradually
grow worse, until it is completely developed.

The voice at this time, has a shrill singing
sound, which has been compared, to the crow-
ing of a cock. a cough generally attends the
disease; very fit of which, agitates the patient
very much, the face becomes flushed: the
eyes protuberant, and a general humor takes
place, attended with a convulsive effort to
unite aspiration at the close of each fit.

Dr Rush says, he has often seen this crow-
ing cough remain for several days, after all
the symptoms had gone off, and then disappear,
without the use of any remedies. This cough
is commonly dry, and if any thing be left up,
it is matter of a purulent appearance, sometimes
intermixed with films, resembling a membrane.

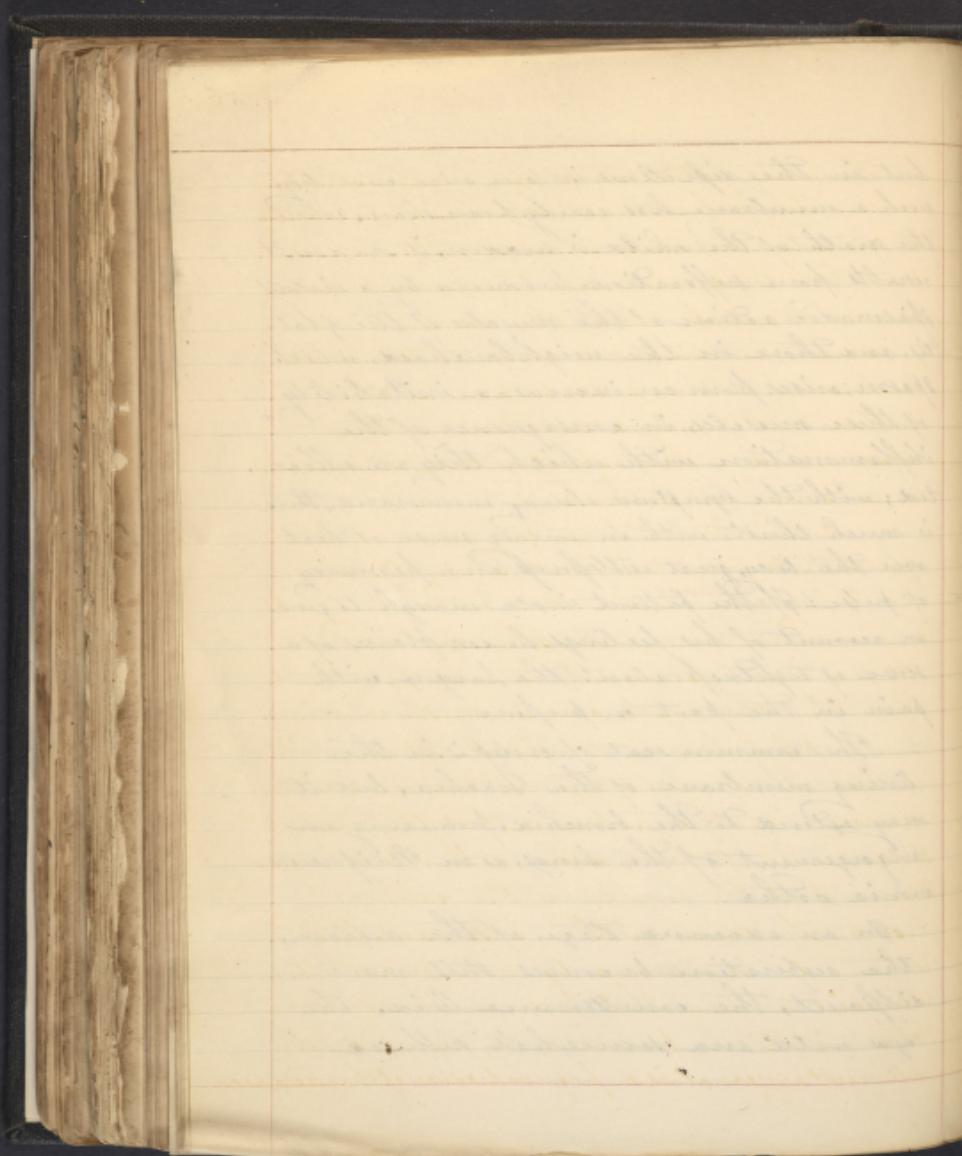
Much has been said by European writers, with
respect, to the existence of a membrane in the
larynx, and which they in the worst cases
suppose to be the cause of death from suffocation.



but in the affections in our own country, such a membrane has rarely been seen, where the death of the child is known, it results from suffocation, produced by a violent spasmodic action of the muscles of the glottis, and those in the neighbourhood, which spasm arises from an increased irritability of these muscles, in consequence of the inflammation with which they are affected; with the symptoms already enumerated, there is much thirst, with an uneasy sense of heat over the body, great restlessness, and frequency of pulse. If the patient is old enough to give an account of his feelings, he complains of a sense of tightness about the Larynx, with pain in the part on pressure.

The common seat of eruct is in the lining membrane of the Trachea, but it may extend to the bronchia, producing an engorgement of the lungs, as in Peripneumonia nottha.

In an advanced stage of the disease, the respiration becomes still more difficult, the countenance livid, the eyes wild and somewhat sunken.



The child after some time becomes more calm, the pulse small and weak, frequently a low delirium now comes on, after which plebitus tendinum, and the usual harbingers of death close the scene.

When the disease is about to terminate favourably, it is by a resolution of the inflammation, by a cessation of the spasm, and a free expectoration of mucus, as in common catarrh.

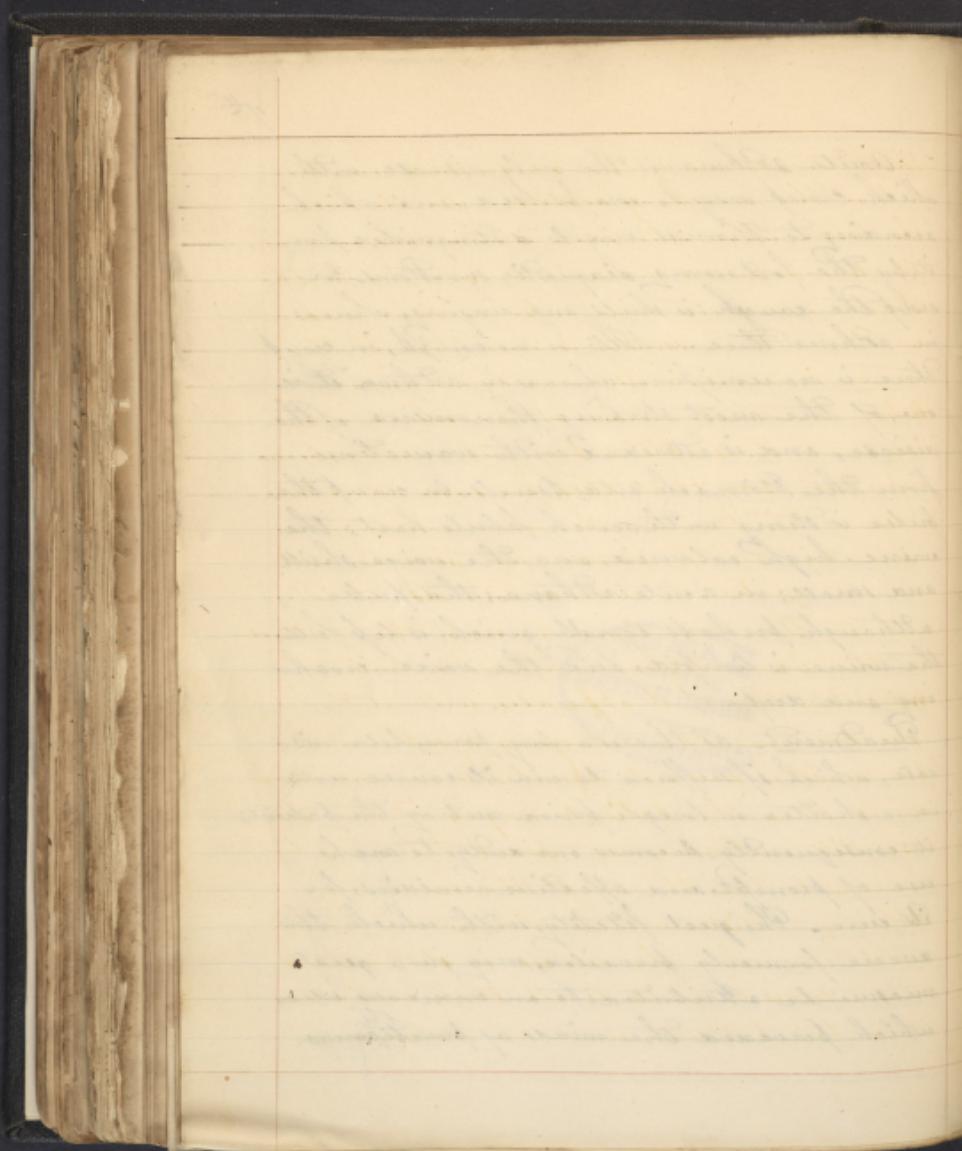
Cold is the chief exciting cause of this disease. It is most frequent during the winter and Spring months, and seems particularly apt to arise from sudden vicissitudes of weather.

It has been observed to be most prevalent near the sea coast, and in marshy countries and is less known in temperate than northern climates. Underwood in his treatise on the diseases of children, observes: that the change from milk to food above sufficient of digestion; is probably sometimes the cause of eructs. The same author, also says: that it may be occasioned by fever, or any other chronic disease that produce this symptom. The irritation produced by worms in the alimentary canal, is a frequent cause of the disease.

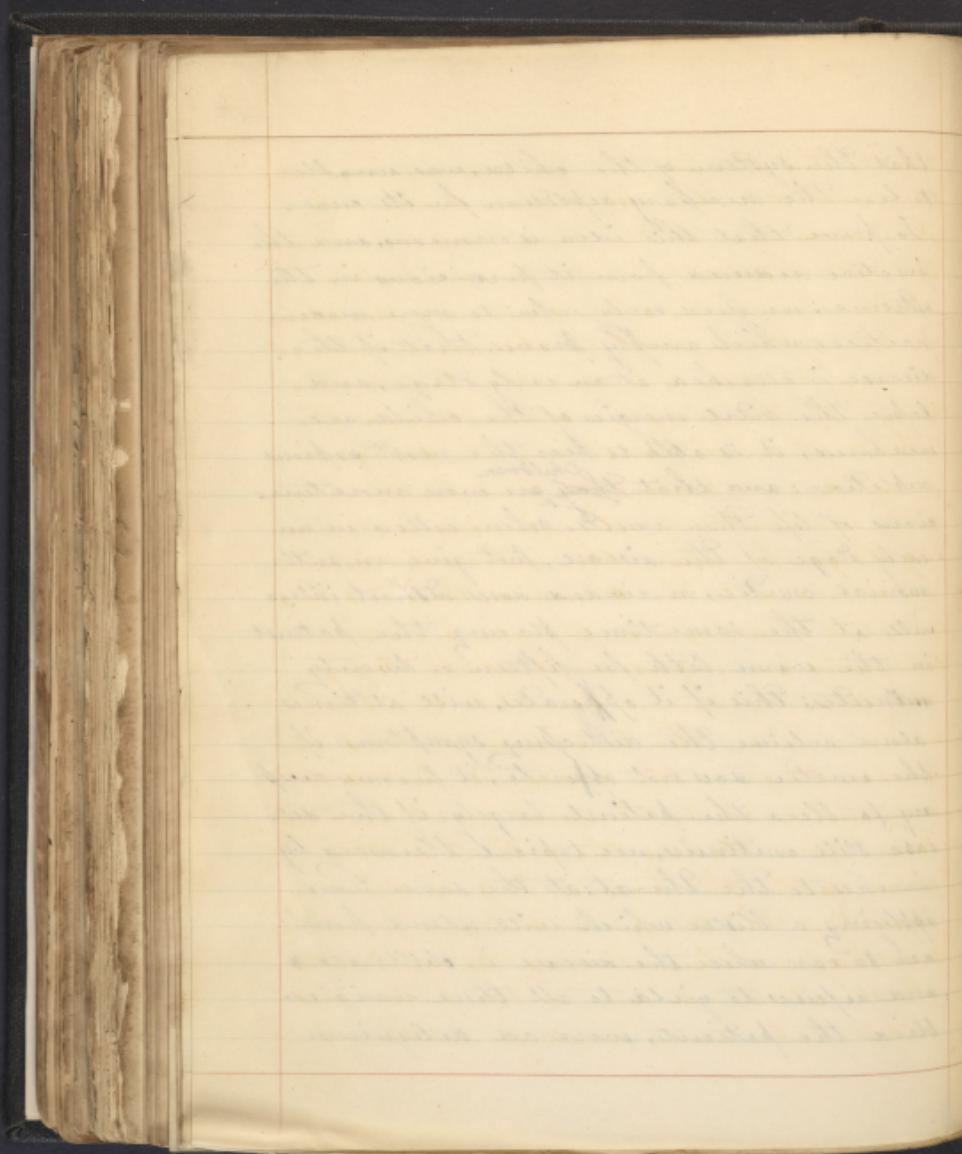


Acute Asthma, is the only disease with which Croup may be confounded, and which according to Thomas may be distinguished from it, by the following diagnostic symptoms. In croup the cough is shrill and ringing, whereas in asthma there is little or no cough; in croup there is no remission; whereas in asthma it is one of the most striking phenomena of the disease, and is attended with evacuations from the Stomach and bowels. In croup the pulse is strong with much febrile heat; the urine high coloured; and the voice shrill and small; in acute asthma; the pulse although perhaps equally quick, is less full, the urine is limpid, and the voice croaking and deep.

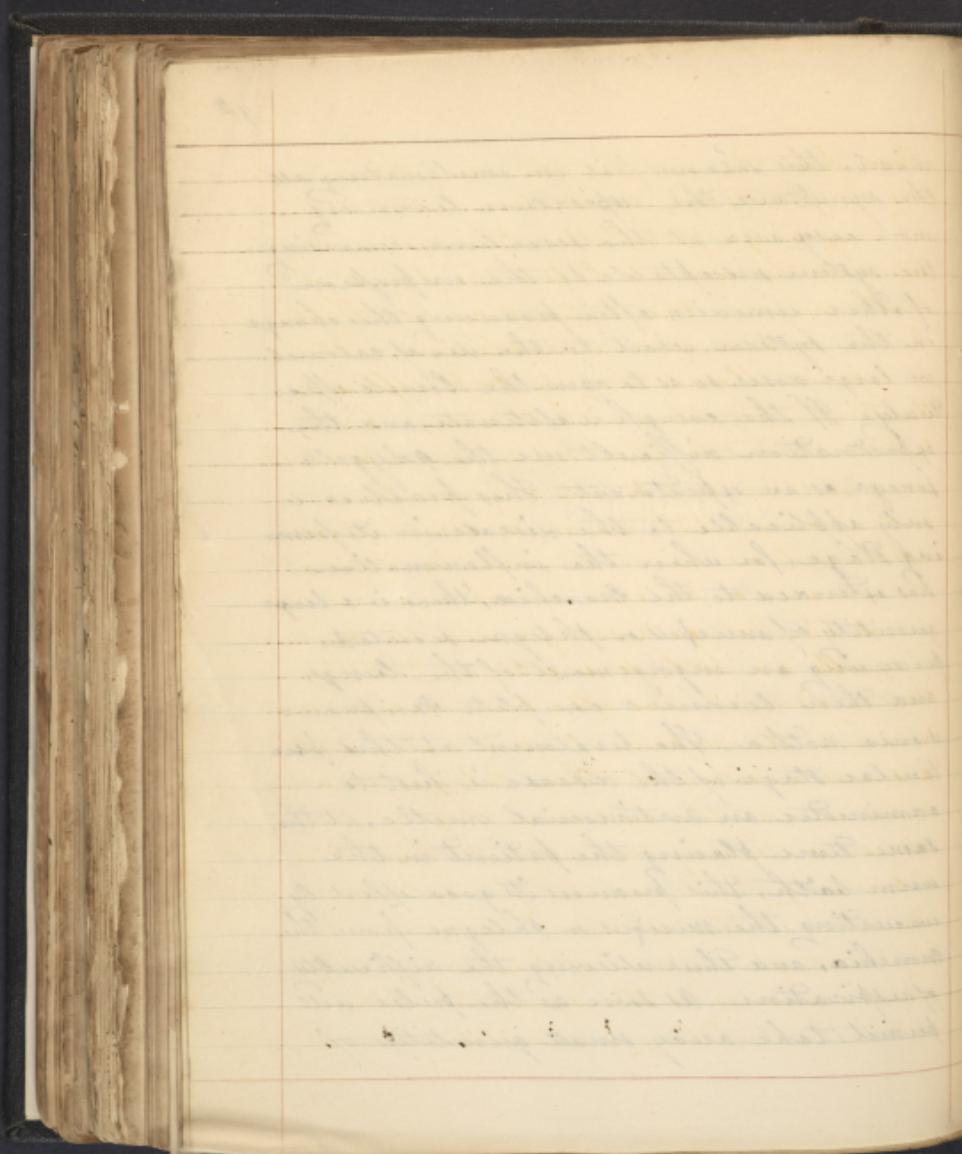
Treatment. - As this is a very powerful disease, which if suffered to run its course, will in a shorter or longer period destroy the patient; it consequently becomes our duty, to make use of prompt, and effective remedies, for its cure. The great fatality, with which this disease formerly prevailed, may in a great measure be attributed, to an erroneous idea, which pervaded the minds of practitioners;



that the system of the child, was unable
to bear the necessary depletion for its cure.
To prove that this idea is erroneous, and the
practice deduced from it pernicious in the
extreme; we need only refer to more modern
practices, which amply proves, that if the
disease is attacked at an early stage, and
before the vital energies of the child, are
weakened; it is able to bear the most copious
depletion; and that ^{children} they are even more tena-
cious of life than adults; when called in an
early stage of the disease, first give an anti-
mortal emetic, in indeed ~~and~~ ^{with} short inter-
vals, at the same time placing the patient
in the warm bath for fifteen or twenty
minutes; this if it operates, will at times
alone relieve the distressing symptoms; if
the emetic does not operate, it becomes neces-
sary to bleed the patient largely; if the dis-
ease still continues, use topical bleeding by
leeches to the throat; at the same time
applying a bitter which will extend from
ear to ear; when the disease is obstinate,
and refuses to yield to all these remedies;
bleed the patient, were ad deliquium



animi, this salam fail in ameliorating all the symptoms, the respiration becoming more easy, and at the same time rendering the system susceptible to the impression of other remedies; after producing this change in the system, resort to the use of calomel in large doses, so as to open the bowels effectually. If the cough is obstinate, and the expectoration difficult use the *Polygonum senega* as an expectorant. This practice is only applicable to the disease in its forming stage, for when the inflammation has extended to the bronchia, there is a large quantity of mucus or phlegm secreted producing an engorgement of the lungs, and then becomes a complete *Peripneumonia nottha*. The treatment at this peculiar stage of the disease is, first to administer an antimonial emetic, at the same time placing the patient in the warm bath, this produces its good effect by evacuating the mucus or phlegm from the bronchia, and thus relieving the difficulty of respiration. As soon as the pulse will permit, take away small quantities of



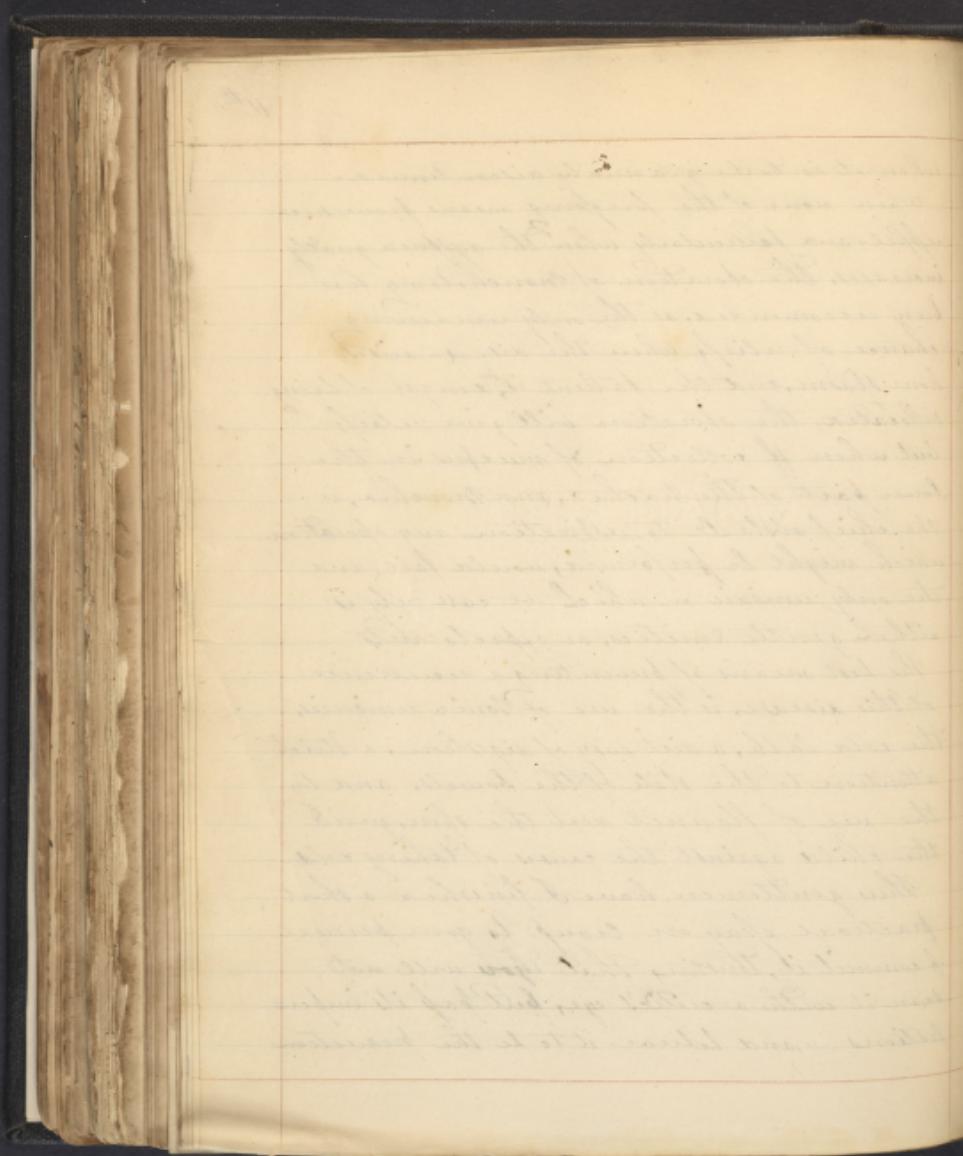
Blood from the arm, at the same time watching its effects on the system; for if taken in very large quantities, the system is immediately reduced below the point of reaction, and the patient sinks. If the pulse shows general depletion, resort to topical flossetting by cups applied to the spine, together with the most stimulating blisters to the thorax; such as cloths rung out in hot spirits of turpentine, and applied over with powdered cantharides; expectorant are now to be used, to blow off the mucus or phlegm, which engorges the lungs. The Polygala senega and the opium of squills are both serviceable in this particular case; it has also been recommended, to inhale the vapours of warm water, with a small addition of ether. Calomel used in small doses at this particular stage of the disease is also very serviceable. Dr. Hamilton of Edinburgh, built exclusively to calomelin the cure of this disease his mode of employing it is, to give a dose of from one to five grains, according to the age of the patient until the breathing is entirely relieved.

when it is to be gradually discontinued.

When none of the foregoing means prove successful, and particularly when the dyspnoea greatly increases, the operation of Tracheotomy has been recommended, as the only remaining chance of relief when the disease arises from asthma, and the patient is in danger of being suffocated, the operation will give relief; but when a collection of mucus in the lower part of the trachea, and bronchia, is the chief obstacle to respiration, any operation which might be performed, would fail, and the only remedy on which we can rely is either gentle emetics, or expectorants.

The best means of preventing a recurrence of this disease, is the use of tonic medicines, the cold bath, a diet easy of digestion, a strict attention to the state of the bowels, and by the use of flannel next the skin, guard the child against the causes of taking cold.

These gentlemen, have I finished a short practical essay on Croup: to your perusal I commit it, thinking that you will not scan it with a critical eye, but pass its imperfections by, and believe it to be the prosecution



12th

of an inexperienced writer

Arch' Baldwyn

March 18th 1811

